Name: Rachel Fischhoff Grade: 5 Date: March 28, 2012

Basic Geometric Ideas

|  |
| --- |
| Lesson Sources: envisionMATH |
| Lesson Objectives:  Content/Process: Students will strengthen conceptual understandings of angles by exploring the geometric elements that compose angles.  Language: Students will become more comfortable with the specific vocab associated with this lesson/unit *and* with the language of comparison (Greater than…Less than…) |
| Standards: 5.G.4. Classify two-dimensional figures in a hierarchy based on properties. |
| Multicultural Content: Language content standards, focus on vocabulary and spoken language. |
| Materials and Advanced Preparation: estimation sheet for warm up, textbook and release sheet copies, SmartBoard |
| Prior Knowledge and Skills Needed: work from previous day: Understanding of right angles. |
| Key/New Vocabulary: line segment, ray, parallel lines, intersecting lines, perpendicular lines |

Lesson Procedure: Part One

|  |  |  |  |
| --- | --- | --- | --- |
| **Time** | **Teacher Actions** | **Student Learning Activities** | **Form of Assessment** |
| 3 min | **1. Warm up**   * Mathematicians, before we begin our lesson today, let’s warm up by practicing front end estimation * (do probs under doc cam, thumb on knee, record student thinking) | * Estimations * Sharing thinking | * Thumbs * Some shared answers |
| 1 min | **1. Connection**   * Mathematicians, on Monday and Tuesday we familiarized ourselves with protractors and began exploring different classifications—kinds—of angles. * Today we are going to take a step back and learn more about the geometric pieces that mathematicians use to build angles. | * Explain purpose of mini-lesson | * Active listening |
| 10 min max | **2. The Teaching (The Giving of Information):**   * Let’s take a look at the chart up on the board. * *Going over SmartBoard chart of terms* * *Ask for examples of intersecting, parallel and perpendicular lines in our real life/in our room*. | * Active listening * Thinking of examples | * Limited participation |
|  | **3. Have-A-Go (optional)**   * Let’s try to apply what we know to this example. * Name 4 points * Name 3 line segments * Name 2 intersecting lines * Name 2 parallel lines   Continuing…T&T through these questions (5-7):   * If PS and TC are parallel and PS is perpendicular to PT, is TC also perpendicular to PT? * Do PS and SP name the same line? * Do PS and SP name the same ray?   Share out from T&T. | How will students be actively involved?  By:   * Practicing the mini-lesson * & * Partner Talk | * Limited participation * Listen in to T&Ts * Sharing out |
| **Anticipated Responses/Outcomes:**   * Some students will be ready to apply what they know immediately. * Others will need to refer back to the definitions. | | | |
|  | **4. The Link**  Mathematicians, today you will apply what you know about lines, rays, and their relationships to each other to solve problems on these worksheets. | **(Workshop Time)**   * Students will complete release sheets. | * Conferring |
|  | **5. Closing (at the share)**  Recap share—what do we know now? How will this help us understand angles tomorrow? | * Sharing some work, mostly ideas. | * Collect/assess work. |
| **Anticipated Responses/Outcomes:**   * Most students will apply this new knowledge. | | | |

**Reflections:**

How did the lesson plan work? What was effective? What did you learn? What would you change for tomorrow or the next time you will use this plan?